ABSTRACT OF THE DISCLOSURE

A method of operating a cooling and heating circuit of a motor vehicle driven by an internal combustion engine includes providing a first cooling medium path through a bypass conduit, a second cooling medium path through a main cooler of the internal combustion engine, a third cooling medium path through a heating heat exchanger, subdividing the cooling medium paths by an electrically actuated valves and forming cooling medium flows by an electrically driven pump, controlling both the valves and the pump by an electronic control unit in dependence on operational and environmental parameters as well as nominal values, reversing a feeding direction of the electrically operated pump in a first operational phase of the internal combustion engine and turned on first cooling medium path, and feeding the cooling medium by the pump in a lower region of the internal combustion engine.